

watershed focus

New Jersey Department of Environmental Protection • Division of Watershed Management

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Municipalities Are Key Partners In Achieving Clean Water

by Bradley M. Campbell, Commissioner, NJ Department of Environmental Protection

Protecting the sanctity of New Jersey's surface and ground water is critical to the quality of our lives, the state of our environment, the stability of our economy and the character of our communities. That is why New Jersey continues to take unprecedented steps to confront significant, long-term threats to our vital water resources. Governor James E. McGreevey clearly understands the critical importance of working hand-in-hand with municipalities to achieve our clean water goals.

Earlier this year, New Jersey adopted two new stormwater regulations that represent the strongest clean-water initiative in the nation. For the first time in 20 years, New Jersey is tackling the serious water-quality threat posed by polluted runoff that washes into our reservoirs, rivers, streams and other waterways during rainstorms and snow melts. Nearly 60 percent of New Jersey's current water pollution is attributed to contaminated or poorly managed stormwater runoff.

(CLEAN WATER continued on page 2)



watershed focus

is a publication concentrating on watershed management, stormwater and nonpoint source pollution management issues in New Jersey. Send comments and subscription requests to:

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*This newsletter is published with funding
provided by
the U.S. Environmental Protection Agency
under Section 319 of the federal Clean Water Act.*

 printed on recycled paper



what's a watershed?

A watershed is the area of land that drains into a body of water such as a river, lake, stream or bay. It is separated from other systems by high points in the area such as hills or slopes. It includes not only the waterway itself but also the entire land area that drains to it. For example, the watershed of a lake would include not only the streams entering the lake but also the land area that drains into those streams and eventually the lake. Drainage basins generally refer to large watersheds that encompass the watersheds of many smaller rivers and streams.

Clean Water

(continued from page 1)

The new rules, which went into effect on Feb. 2, are consistent with Governor McGreevey's smart-growth initiatives and seek to steer new development away from sensitive streams and reservoirs that supply drinking water. Poorly designed development threatens our critical natural resources by increasing the amount of impervious cover and large, scattered sites of housing create currents of stormwater runoff that carry trash, road salts, oil and other contaminants into our waterways. The new rules also seek to reduce costly flooding.

Carried out primarily at the municipal level through local land-use planning, designing and decision-making, these rules represent a fundamental shift in our approach to stormwater. Rather than seeing this fresh water as a nuisance to be channeled away and eventually lost to the saltwater ocean, we are recognizing stormwater as a valuable resource that recharges groundwater supplies.

The rule that directly affects municipal operations, as distinct from private development, is mandated by federal regulations. This rule sets up a new program of permits for municipalities and counties, most public colleges and universities and many state and federal agencies, including highway authorities. The New Jersey Department of Environmental Protection (DEP) worked with the New Jersey State League of Municipalities for months past the deadline by federal law to minimize the cost and burden of this program for municipalities.

Under this permitting program, municipalities and other entities must use a variety of techniques to reduce polluted runoff at their existing and planned facilities and infrastructure, such as storm drains and certain roadways. DEP will continue to provide guidance and assistance to all local officials to help identify the best stormwater control techniques for your area.

The permit features phased-in milestones, giving municipalities two years to comply. For instance, municipalities are required to adopt a stormwater pollution prevention plan and a stormwater management plan within one year from the permit date. Municipalities then have another year to adopt a stormwater control ordinance to implement provisions in the stormwater management plan, which municipalities need to adopt as part of their master plan under the Municipal Land Use Law.

Under the MLUL, municipalities will submit their stormwater plans and ordinances to the county for review. Counties will review and approve these plans and ordinances within 60 days, otherwise they automatically become effective.

To comply with the permit, municipalities need to implement the second stormwater rule, which applies to *new* development projects.

As of Feb. 2, planning boards reviewing certain *residential* development applications are required to apply these new stormwater management standards to residential development. Subject to these standards are residential developments that involve an acre or greater of land disturbance and have not received prior specific local and state approvals that provide grandfathering relief as established in the new rule.

The new stormwater standards go into effect for commercial and industrial development applications after municipalities adopt their stormwater pollution plans and ordinances.

We are offering guidance to municipal officials involved in land-use decisions and their consultants in a Best Management Practices manual that includes effective nonstructural stormwater management techniques such as maintaining natural drainage paths and vegetation and minimizing additional impervious cover.

DEP encourages municipalities to work together and share services to achieve better planning and reducing costs. We believe New Jersey's 21 counties have an excellent opportunity to take the lead in working with their municipalities and neighboring towns to develop regional stormwater management plans that will cover an entire watershed.

To ensure this important clean-water initiative succeeds, we remain committed to working closely with the League of Municipalities, county officials, the New Jersey County Planners Association, the New Jersey Planning Officials, the New Jersey Society of Municipal Engineers, watershed organizations, nonprofit groups and citizen activists, among others.

For more than a year, we have worked with local officials and the League of Municipalities to address concerns about the impact of these rules on municipalities. In response to those concerns, DEP reduced municipal permit requirements while maintaining the rules' clean-water protections.

Further, to significantly lighten what we recognize is a resource challenge to municipalities, we minimized requirements for street sweeping, simplified the distribution of educational materials, reduced storm drain labeling and extended some deadlines. We also will help municipalities meet a critical public-education requirement by producing standard outreach materials that every mayor can duplicate to inform residents and businesses that must play a role in this overall effort. We also are planning a statewide public education campaign that will supplement local efforts.

What's more, Governor McGreevey is making \$6 million in grants available this year to help municipalities and counties comply with the new rules. He has proposed another \$6 million for the new fiscal year that begins July 1.

This spring, DEP distributed a packet of helpful, plain-English materials that provide how-to advice for easy compliance. We also produced guidance documents that include model ordinances, a compact disk and other important information that also can be found on our website at www.nj.gov/dep.

Additionally, DEP has scheduled three regional training seminars in July with key audiences, including municipal and county officials, consultants, builders, planners and engineers.

Upcoming Regional Stormwater Seminars

South:

July 13 at Rowan University, Glassboro

North:

**July 20 at the Morris County Fire Fighters &
Police Academy, Morristown**

Central:

July 29 at Cook College, New Brunswick

**Cost of registration is \$20. To register, call Cook College Office of Continuing Professional Education at (732) 932-9271
or visit www.cookce.rutgers.edu**

On May 6, 2004, more than 200 students from St. Ambrose Catholic School in Old Bridge came together to raise awareness and celebrate our Earth's most precious resource: water. The water festival was a partnership between St. Ambrose Catholic School, Project WET (Water Education for Teachers) and the AmeriCorps Lower Raritan Watershed Ambassador. The festival was funded by a grant from the NJ Department of Environmental Protection through Project WET. St. Ambrose Catholic School was one of several schools in New Jersey that received funds to coordinate and sponsor this event.

St. Ambrose Catholic School students have been preparing for the festival by learning about the water cycle in previous classes and creating water-use murals to be displayed at the festival. Students from third, fourth, fifth, sixth and eighth grades attended the festival, which was held outdoors on the school grounds. The students were divided into small groups to visit the seven different learning stations which focused on water properties, nonpoint source pollution, watershed management, erosion issues, wetlands importance, water supply and usage and water conservation efforts. The learning stations were entitled: Water Works, the Long Haul, Common Water, Water Taste Test, Run-Off Race, H2Olympics and Turbidity or Not Turbidity. At each station, students recorded what they learned, observations and important water-related definitions as a keepsake for the day's events.

At the end of the morning activities, all of the students gathered together to raise their water bottles in a toast to water. The Water Festival concluded with a visit from Dave Orleans, a well-known Earth singer. Mr. Orleans led a sing-along with the students to recapture all the learning from the day's events. Mr. Orleans also taught the students about their watershed address, the Deep Run Watershed.

This Project WET Water Festival was an excellent way to raise the awareness of the students about their local environment and how they can help protect it. With the assistance of a wonderful group of volunteers and the generous support of the businesses and organizations in the community, this festival was a great success thanks to all who volunteered and contributed.

If you would like more information about Project WET and the Water Festival Grant Program, please visit their website at www.nj.gov/dep/seeds/projwet or email Colleen Gould, NJ Project WET Coordinator at njwet@optonline.net.



Students Celebrate the Wonders of Water

*by Shannon Buckley, NJ Watershed Ambassador for Lower Raritan,
South River and Lawrence Brook Watersheds*



Youth Service Day Celebration in Lakewood

*by Paul Simmons, NJ Watershed Ambassador
for Cape May Watersheds*

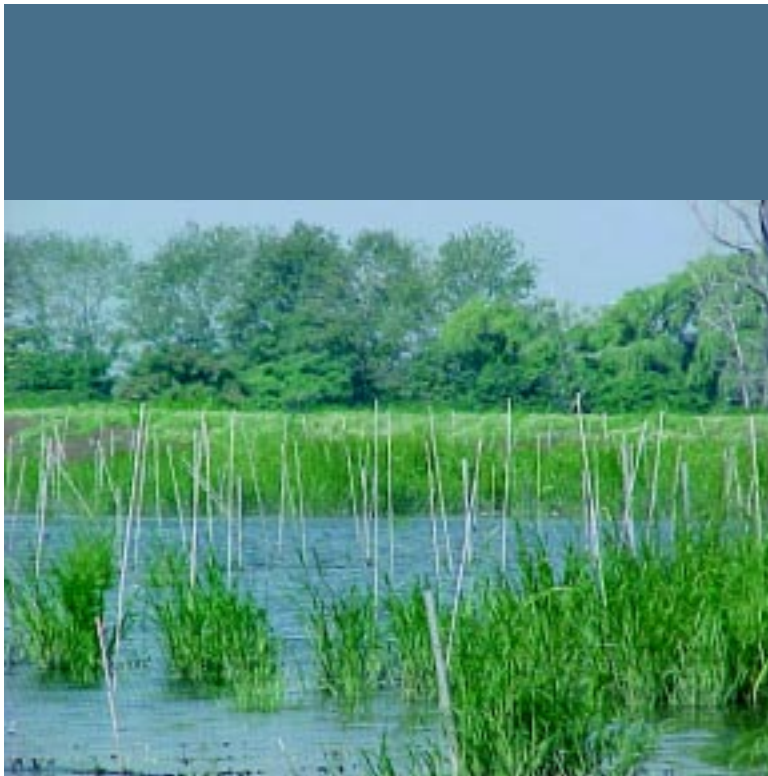
In honor of National Youth Service Day and Arbor Day, members of two AmeriCorps programs, the NJ Watershed Ambassadors and Reading Partners, worked with local students, parents and community volunteers on April 28 to spruce up the grounds of Lakewood High School.

Participants planted flowers, picked up trash to bring new life and a sense of rebirth to the school grounds and made the area more inviting for its students. In addition, the students of the Lakewood High School PALS program marked storm drains to enhance awareness of nonpoint source pollution and stormwater runoff. The markers indicate where a storm drain empties out to so that people passing by are conscious of how their actions may affect the environment. Presentations given by NJ Watershed Ambassador Paul Simmons earlier in the day helped to educate the volunteers on the importance of keeping our waterways clean and pollution free.

The day ended with all the volunteers huddled around the mound of trash that was picked up from the schoolyard, appreciating a job well done. The volunteers and AmeriCorps members had smiles from ear to ear and a warm feeling of satisfaction.

New Jersey AmeriCorps programs were proud to be teaming up with the Lakewood students to bring natural life and vibrancy to their school and celebrate Arbor Day as a part of National Youth Service Day. Across the globe, millions of youth participated in National Youth Service Day, the largest service event in the world, on April 16 - 18, 2004. They tutored young children, registered new voters, educated their communities about good nutrition, distributed HIV/AIDS prevention materials and met many more community needs through their service. National Youth Service Day supports youth on a lifelong path of service and civic engagement and educates the public, the media and elected officials about the role of youth as community leaders. Many of the AmeriCorps programs have similar projects across the state that celebrate Youth Service Day and call on the youth of today to become active in their local communities and to make a difference.





Educational Resources Available Through The DWM

by Kyra Hoffmann, NJ Department of Environmental Protection

Why educate about stormwater, nonpoint source pollution and watersheds?

Whether they know it or not, every resident of New Jersey may contribute to polluted stormwater runoff through his or her daily activities, such as fertilizing the lawn, throwing litter down storm drains or not cleaning up after pets. As a result, polluted stormwater runoff from the surrounding watershed is one of the greatest threats to many of our ponds, creeks, lakes, wells, streams, rivers, bays, ground water and the ocean. Simple changes in daily lifestyle can make a tremendous difference in the quality of New Jersey's water resources.

How can we help you conduct outreach and education about water?

The Division of Watershed Management (DWM) has many tools to assist you in your stormwater, nonpoint source pollution or watershed education effort. These include newsletters and brochures for the community at large, as well as teacher workshops, free classroom presentations by the NJ Watershed Ambassadors Program, volunteer monitoring programs, training workshops and free publications for students and teachers.

Some of the resources available through the New Jersey Department of Environmental Protection (DEP) Division of Watershed Management include:

New Jersey Watershed Ambassadors Program

The New Jersey Watershed Ambassadors Program is a community-oriented AmeriCorps program designed to raise awareness about water issues in New Jersey. Through this program, AmeriCorps members are placed across the state to serve their local communities. Watershed Ambassadors monitor the state's rivers by using two volunteer monitoring protocols and also train community volunteers to use these same techniques. In addition, Watershed Ambassadors make interactive presentations about water and watershed issues to community organizations and schools.

Project WET (Water Education for Teachers)

Project WET is a nationally renowned program that offers teachers a better understanding of the world's water resources through hands-on, multi-disciplinary lessons. Project WET teaches the importance and value of water

in our every day life with formal and non-formal educators while offering specialized programs about New Jersey's water resources and watersheds. The *Project WET* curriculum and activity guide is a collection of innovative, water-related activities that are hands-on and easy to use in all instructional settings. The lessons and projects in *Project WET* were developed, field-tested and reviewed by hundreds of educators and resource managers around the country. The guide is available only by attending a workshop.

In addition to workshops, NJ Project WET offers the Water Festival Grant Program. A Water Festival is a one-day celebration of water with a focus on a school's watershed. Students participate in a series of learning stations that examine water use over time, water's role in shaping our country, what a watershed is, how water is cleaned and used again, how a molecule travels through the water cycle and much more.

NJ Project WET offers a unique learning opportunity for high school students and teachers through its Watershed Stewards Program. After participating in a weekend leadership workshop, the high school teams focus on a watershed service project that will address an environmental concern. Each Watershed Stewards Team must work with three community organizations and other volunteers to assist with the project. Participants receive a small grant to conduct a Watershed Stewardship Project.

Harbor Watershed / Urban Fishing Program

The goal of the Urban Fishing Program is to educate young students living in the Newark Bay Complex about the hazards of eating contaminated fish and help them to discover the beauty of the great natural resource. Students who participate in the program sample recreational opportunities that the bay has to offer while learning how to be responsible citizens within the estuary. The students experience four days of intense yet enjoyable instruction related to the Newark Bay Complex. Throughout the four days, students are given hands-on experiences, which will endure with them for a lifetime. The program also includes a storm drain marking program that can help municipalities fulfill their stormwater permitting requirements. The program currently is offered in Newark, Jersey City, Bayonne and Elizabeth.

Clean Water Raingers Program

This program offers educators a number of teaching materials for their students as well as background information on watersheds and nonpoint source pollution. Educators who participate in the Clean Water Raingers program are provided with free booklets and associated materials for their elementary school-age students. The *Clean Water Raingers Coloring Book*, *How to be a Clean Water Rainger Activity Booklet* and the Clean Water Raingers Stickers are also available for distribution at family-oriented events and festivals. These publications are also available online on the DEP's environmental education webpage www.nj.gov/dep/seeds.

Watershed Watch Network

Watershed Watch Network is a program acting as an umbrella for all of the volunteer monitoring programs within New Jersey. The Watershed Watch Network has two advisory committees; Data Users and Water Resource Managers make up the Internal Advisory Committee, and Volunteer Monitoring Program Managers throughout the state make up the Watershed Watch Network Council. A four-tiered approach has been developed to allow for volunteers to pick their level of involvement based on what the purpose of their monitoring program is, what the intended data use is and who the intended data users are. The goal of this new program is to provide acceptable protocols and Quality Assurance/Quality Control requirements for volunteers if they chose to submit their data to the DEP, to assist volunteers in designing and building upon their existing programs and to assist data users in gathering sound data for their uses.

Publications

The DWM produces a number of publications that are available for free distribution by municipalities, watershed associations, environmental groups or other organizations. These include *What's a Watershed?* brochure, New Jersey's Watersheds poster, *Storm Drain Labeling Guidelines for New Jersey* and Clean Water Raingers publications.

For more information about any of these programs, please call the DEP Division of Watershed Management Office of Outreach and Education at (609) 292-2113 or visit our website at www.nj.gov/dep/watershedmgt.



Volunteer Monitoring Summit Set For October 1 and 2

The NJ Department of Environmental Protection in partnership with the Watershed Watch Network will be holding its second Volunteer Watershed Monitoring Summit on October 1 and 2 at the Clarion in Edison. Volunteer monitors from across the state are invited to participate in this event. If your organization has information to share with fellow monitors, please contact our office to submit an abstract. This is an excellent opportunity to find out how to set up a local monitoring program, to discover what other organizations are doing and to learn about new directions from the Division of Watershed Management.

For more information, contact Danielle Donkersloot, Volunteer Monitoring Coordinator at (609) 292-2113 or danielle.donkersloot@dep.state.nj.us.

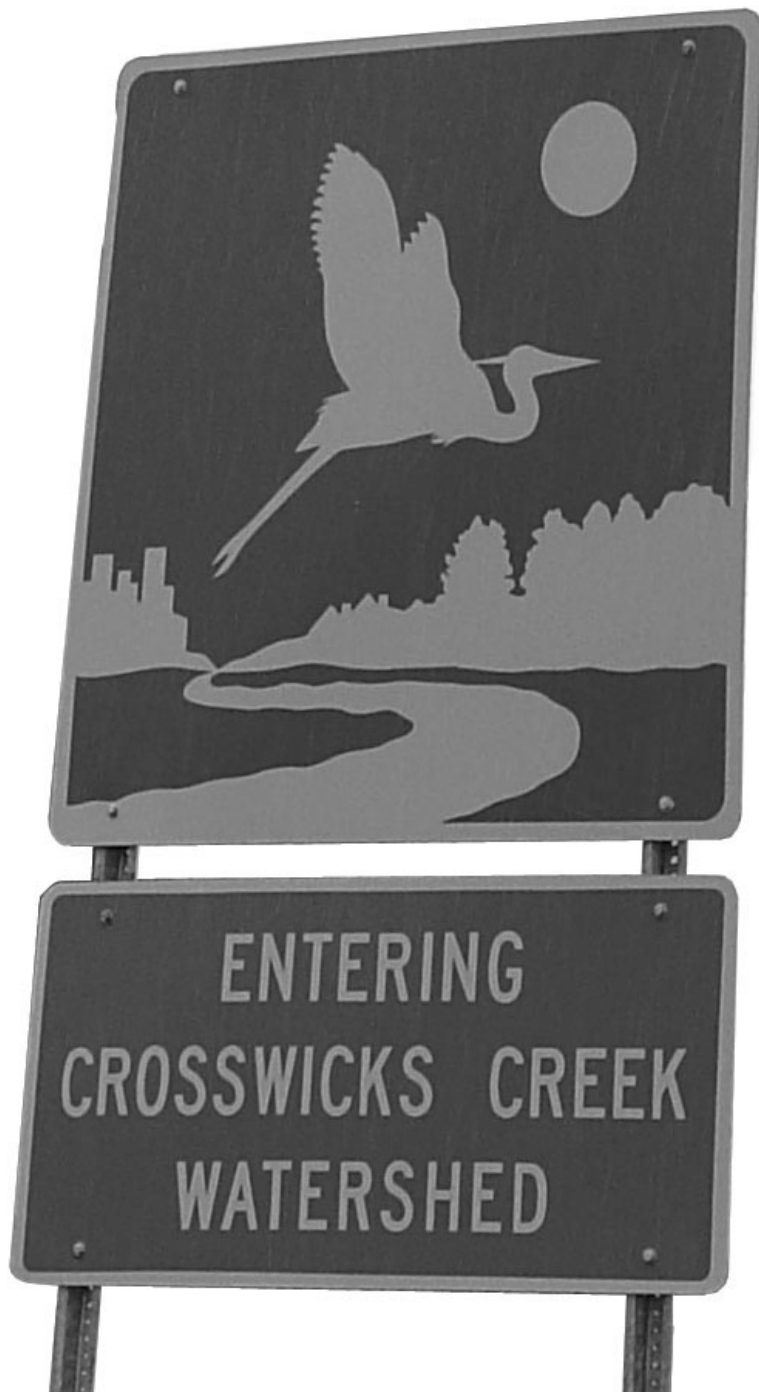


Watershed Awareness Campaign Nears Completion

by Amy E. Messeroll, Watershed Partnership for New Jersey

The Watershed Partnership for New Jersey (WPNJ) is educating New Jersey drivers about the state's watershed systems, one sign at a time.

In a project to be completed this spring, a total of 153 watershed identification signs will be posted along New Jersey state roads and highways, thanks in part to a grant from the New Jersey Department of Environmental Protection. The project's completion is designed as part of the state's celebration of May as Watershed Awareness Month.



The project began last year with the posting of nearly 90 watershed identification signs and the development of a series of educational public service ads. The signs and ads are part of the Watershed Partnership for New Jersey's Watershed Awareness Campaign to increase awareness and understanding of the state's 46 watersheds. The campaign is designed to educate the public about the importance and presence of New Jersey's watersheds, while informing residents of their 'watershed address.'

"The purpose of posting the watershed signs is to identify the boundaries of the different watershed regions in New Jersey," says WPNJ Executive Chair, Colleen Gould. "With this, it is our hope that people will begin to identify with the word 'watershed' and start asking questions about what watersheds are and why they are important."

Watersheds are defined as areas of land where all of the water, both above and below ground, drain into a large common body of water, such as a major river. High points in the landscape determine watershed boundaries. Major New Jersey roadways, such as Route 206, take drivers through several of the state's watersheds, now identifiable through the signs. The road signs are a visual reminder of the connection between the state's watershed systems, and how human actions can affect the water quality of a community.

The Watershed Partnership for New Jersey's mission is to enhance watershed awareness through education and community involvement and to create a statewide network of watershed resources. For more information and to find your watershed address, please visit www.WPNJ.org.



Storm Drain Labeling Guide Available

by Kyra Hoffmann, NJ Department of Environmental Protection

Interested in labeling the storm drains in your community? The New Jersey Department of Environmental Protection (DEP) has prepared a free step-by-step guide on how to make the most of labeling the storm drains in your community. The guide features information on how to organize an event, types of labeling options available, tips on how to label and additional resources for you.

Why Label Storm Drains?

Storm drain labeling is a great way to make people in your community more aware of nonpoint source pollution and polluted runoff. Residents may not be aware that most storm drains empty directly into local waterways, without treatment. Some individuals may view storm drains as receptacles for garbage, used motor oil, leftover paint, pet waste or other pollutants. Storm drain labeling serves as an educational tool to remind people about the connection between storm drains and local waterbodies.

By labeling storm drains we can make everyone more aware of the nonpoint source pollution and polluted runoff. This is one step in educating people so they can change their attitudes and behaviors that contribute to the problem.

Storm drain inlet labeling is also a requirement of New Jersey's new municipal stormwater permitting program. All Tier A and B municipalities are required to establish a storm drain inlet labeling program and to label all storm drain inlets that are along municipal streets with sidewalks and all storm drains within plazas, parking areas or maintenance yards operated by the municipality. This program establishes a schedule for labeling, develops a long-term maintenance plan and, when possible, coordinates the efforts with watershed groups and volunteer organizations. On an annual basis, these municipalities must identify the number of storm drains labeled. For more information on this program, visit www.njstormwater.org or call (609) 633-7021.

A key factor in the success of a storm drain labeling program is visibility. Publicity in the local media about the event and volunteer participation in the event greatly increase the value of the labeling program as an educational tool. Municipalities are not required to use volunteers or seek media attention, but these activities do improve greatly the overall value of the program. Municipalities may opt to label the storm drains themselves or organize the storm drain labeling activities of local volunteers.

This guide is available online at www.njstormwater.org/tier_A/education. This site also features other supplemental educational resources for municipalities seeking to fulfill their new stormwater permitting requirements. In addition, paper copies are available free of charge by calling (609) 292-2113.



Making the Watershed Connection: An Interactive Conference for New Jersey Educators

June 29 and 30, 2004 at the EcoComplex in Bordentown, NJ

The Watershed Partnership for New Jersey (WPNJ) and the New Jersey Department of Environmental Protection invite you to their first annual two-day interactive conference for educators. Conference sessions will explore New Jersey's dynamic watersheds and connect educators with regional resources, curriculum materials and more.

This workshop is an extraordinary value. In addition to receiving professional development credits, you also will receive many of the guidebooks and curriculum at a discount. The Healthy Water, Healthy People and New Jersey WATERS alone regularly would cost \$70, but are included in the \$35 registration fee. All workshops will be interactive. At lunch, students and their advisors discuss their successful watershed stewardship projects.

New Jersey Professional Development Credits are provided by ANJEE. Provider #679.

Workshop Highlights - June 29

- Healthy Water, Healthy People Curriculum Guide and Testing Kit Manual
- New Jersey WATERS (A Watershed Approach to Teaching Ecology of Regional Systems)
- Regional Curriculum Samplers
- Ideas and Strategies for Student Watershed Action Projects

Field Trips - June 30

Participants can select one field trip that will feature either canoeing, boating, volunteer monitoring, storm drain labeling or stream clean-ups.

Registration Costs

Only \$20 per person for June 29 or \$35 for both June 29 and June 30. Registration includes curricula, workshop materials, continental breakfast and lunch on June 29.

For more information or to register, call Cook College Office of Continuing Professional Education at (732) 932-9271 or visit www.cookce.rugters.edu or www.nj.gov/dep/watershedmgt.

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